UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,548	02/27/2007	Stephen George Dawe	7984-88126	2260

42798 7590 06/07/2010

FITCH, EVEN, TABIN & FLANNERY
P. O. BOX 18415
WASHINGTON, DC 20036

EXAMINER	
SINGH, SUNIL	
ART UNIT	PAPER NUMBER
3672	
MAIL DATE	DELIVERY MODE
06/07/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/577,548	DAWE, STEPHEN GEORGE	
	Examiner	Art Unit	
	Sunil Singh	3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 April 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4,5,7,8,10 and 14-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4,5,7,8,10,14-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 4,5,7,8,14-17,10,18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese document '199 in view of Kovacs (US 3469407)

Japanese document '199 discloses a rock bolt which in use is inserted in a drill hole extending from a rock face into a rock body and which includes: a radially expandable elongate tubular member (2) which is formed with an inlet through which a pressurized fluid can pass into (see abstract) an interior of the tubular member, thereby to expand the tubular member in a radial direction (see Fig. 2) and so effect a first frictional anchoring action of the tubular member with a wall of the drill hole at a first location near a mouth of the drill hole (see Fig. 4); a further elongate member (5) having a first end secured to one end of the tubular member and a second end; and another expansion anchor unit (2) that is connected to the second end of the further elongate member and which is operable to effect a second anchoring action with the wall of the drill hole at a second location that is displaced from the first location. Re claim 4, see Fig. 2. Re claim 5, bearing plate (see Fig. 4). Re claim 7, member (2) is swaged, welded or threadedly engaged with shank (5). Re claim 8, the one end of the tubular member

(2,3) encloses the first end of the shank (5). Re claim 15, the first end (3) of the further elongate member (5) is directly secured to the tubular member (2). Re claim 16, includes a coupling device (3) which is secured to the tubular member (2) and the further elongate member (5) is indirectly secured to the tubular member by being detachably threadedly engaged with the coupling device. Japanese document '199 discloses the invention substantially as claimed. However, Japanese document '199 is silent about including a closed end at the radially expandable member, a mechanical expansion anchor unit including a wedge member, a plurality of shells which are movable by the wedge member to effect the second anchoring section and a further elongate member connected to the closed end and operates the mechanical expansion unit. Kovacs teaches an expansion anchor unit (12) including a wedge member (16), a plurality of shells (18,19) which are movable by the wedge member to effect the second anchoring section. Further Kovacs teaches a further elongate member (the bolt between member 16 and 17) for operating the mechanical expansion unit (12). It would have been considered obvious to one of ordinary skill in the art to modify Japanese document '199 by substituting at least one of the anchoring means (12) and the further elongate member (the bolt between members 16 and 17) as taught by Kovacs for at least one of the anchoring means (2) and further elongate member (5) as disclosed by Japanese document '199 since the substitution of one known element for another would have yielded predictable results. It should be noted that there is a finite number of identified predictable solutions having a reasonable expectation of success. For example, replace the proximal member (2) of Japanese document with mechanical

expander (13) of Kovacs or replace the distal member (2) of Japanese document with mechanical expander (12) of Kovacs. Furthermore, it is obvious to have the distal anchoring means of Japanese document be replaced with the anchoring means taught by Kovacs since such a modification allows one to still be able to inject the expandable fluid to expand the expandable anchor.

With regards to claim 10, it would have been considered obvious to include a biasing means in order to keep the anchoring means together during transportation.

Response to Arguments

3. Applicant's arguments filed 4/21/10 have been fully considered but they are not persuasive. Applicant argues that the prior art fail to teach an expandable tubular member having a closed end connected to one end of a further elongate member. The examiner disagrees. Upon modifying Japanese document in view of Kovacs above, the expandable tubular member will have a closed end because the further elongate member taught by Kovacs would have replaced hollow member 5 of the Japanese document thereby creating the closed end. Applicant argues that the prior art fail to teach that the first and second anchoring actions are independent of one another. The examiner disagrees. Upon modifying the Japanese document in view of Kovacs as discussed above, the proximal member (2) of Japanese document would perform one anchoring action via pressurized fluid and the mechanical expansion unit (12) of Kovacs would perform another anchoring action via rotation of the further elongate member (the

bolt between members 16 and 17 of Kovacs). Therefore, the anchoring actions are independent of one another.

4. Applicant argues that there is no reason to combine Japanese document with the teachings of Kovacs. As set forth by the Supreme Court in the KSR decision, the substitution of one known element for another to yield predictable results is an obvious substitution to one of ordinary skill in the art. By having an expandable anchor and mechanical anchor one can overcome the deficiencies of the expandable anchor by having the mechanical anchoring means on the other hand one can overcome the deficiencies of the mechanical anchor by having the expandable anchoring means. Furthermore, it should be noted that there is a finite number of identified predictable solutions having a reasonable expectation of success. For example, replace the proximal member (2) of Japanese document with mechanical expander (13) of Kovacs or replace the distal member (2) of Japanese document with mechanical expander (12) of Kovacs. Furthermore, it is obvious to have the distal anchoring means of Japanese document be replaced with the anchoring means taught by Kovacs since such a modification allows one to still be able to inject the expandable fluid to expand the expandable anchor.

5. Applicant argues that it is not clear which one of the Japanese anchor (2) would be replaced with the anchoring means taught by Kovacs. It is clearly obvious it would be the anchoring means at the distal end of Japanese document that would be replaced by the anchoring means taught by Kovacs otherwise one would not be able to inject the expandable fluid to expand the expandable anchor.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sunil Singh/
Primary Examiner, Art Unit 3672

Sunil Singh
Primary Examiner
Art Unit 3672

SS
6/4/10